



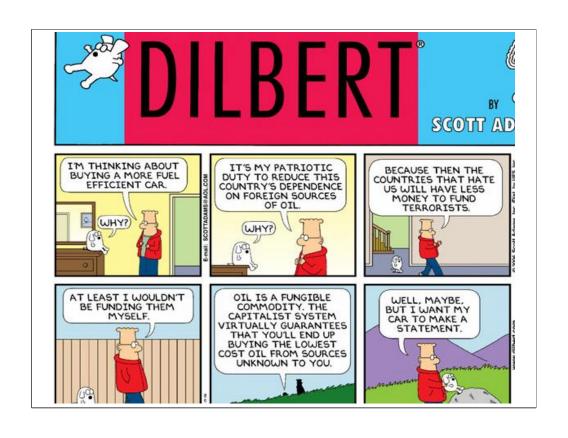
August 3, 2005
Drilling for Broke?
Experts Debate 'Peak Oil'

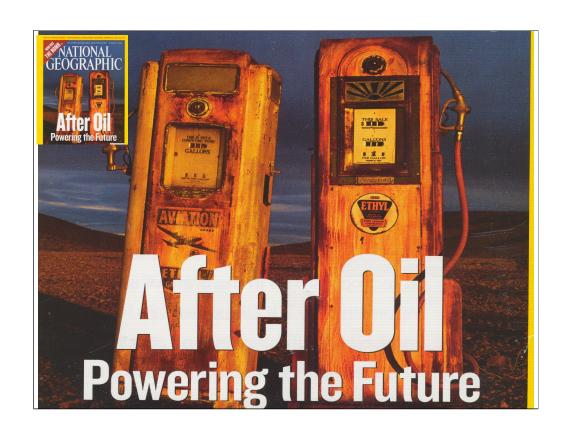
The New York Fimes

21st August 2005
The Breaking Point by PETER MAASS

"When a crisis comes -- whether in a year or 1in 0 -- it will be all the more painful because we will have done nothing to prepare for it".









We have created an astounding civilization, lit up the night sky.



Man's long adventure with knowledge has been a climb up the heat ladder. The creature that crept furred through the glitter of blue glacial nights now lives surrounded by the hiss of steam and roar of engines... And he is himself a flame, a great roaring, furnace...

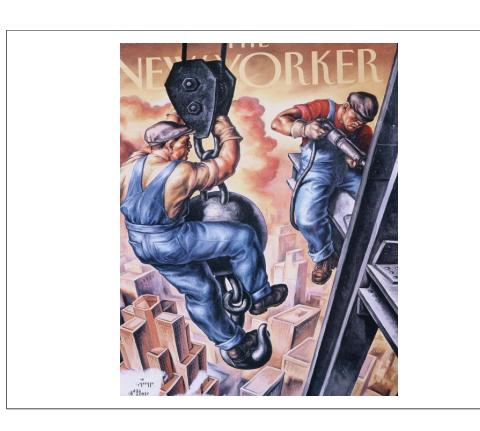


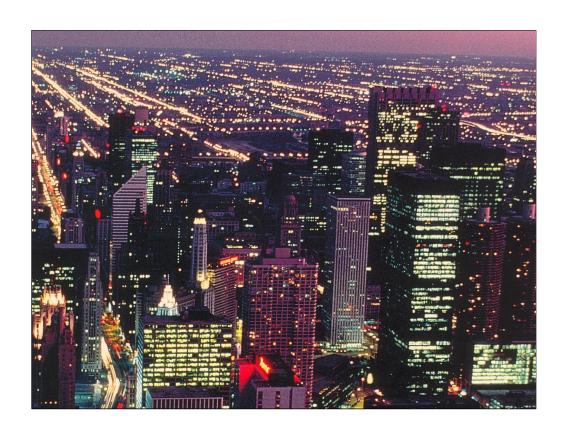


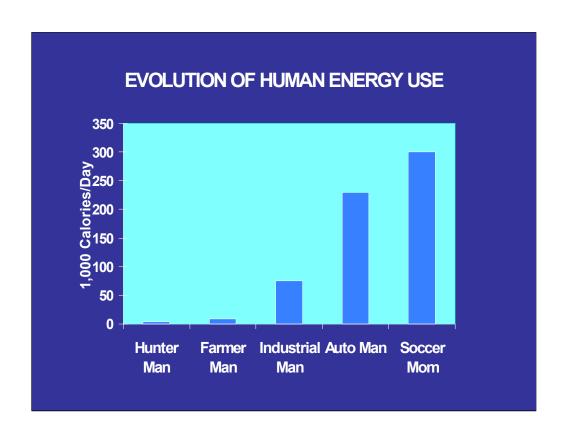




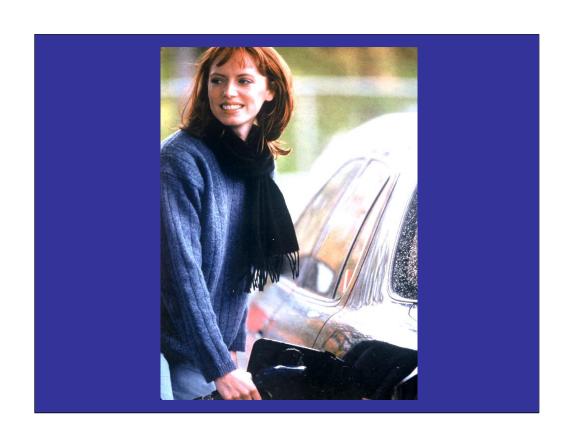


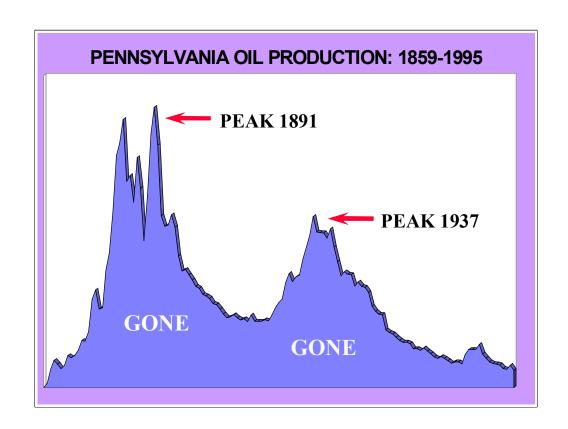




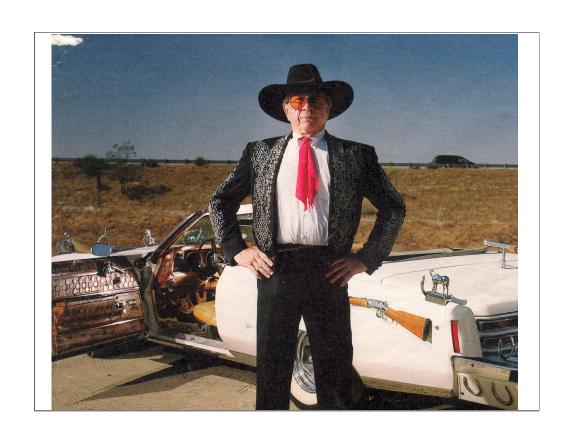


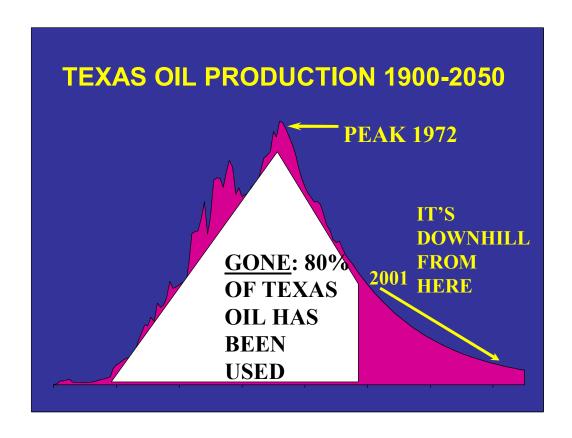
We are using about 100x more energy than our 1890 ancestors. It's now about 1 million btu per person per day—equivalent to 100 pounds of coal, or 8 gallons of gasoline, or one lightning bolt per person.





When you are looking at these graphs, it's important to understand that the area under the curve represents all the oil that has been used up. As you can see, the vast bulk of the oil that will ever be produced in PA is gone. It's history. Pennzoil lives on as a brand name at Walmart, but PA oil is gone.

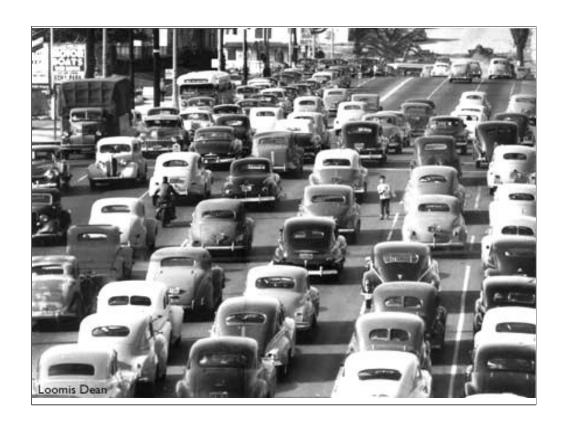


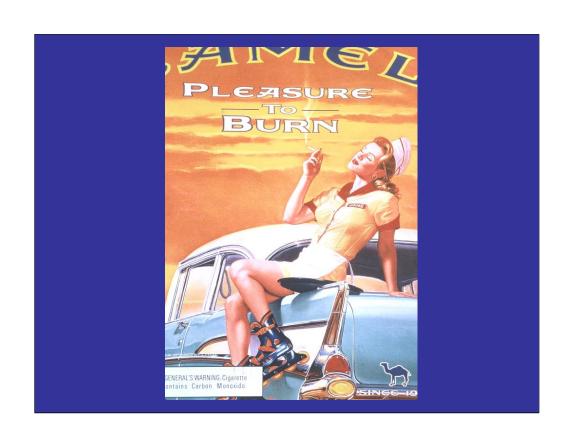


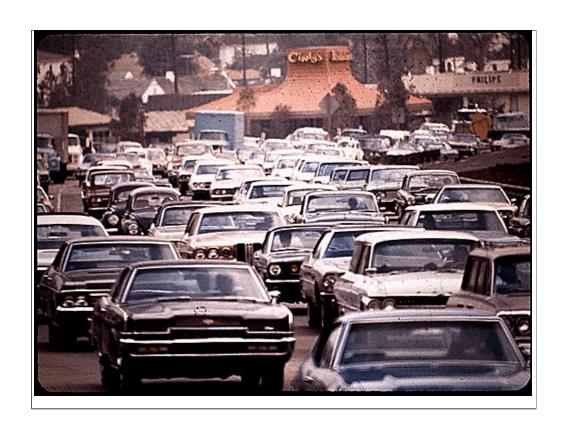
Texas was one of the world's top ten oil provinces. Texas is no longer self-sufficient in oil and must import \$6 billion worth each year. In a rational country this would be a blinking red light.

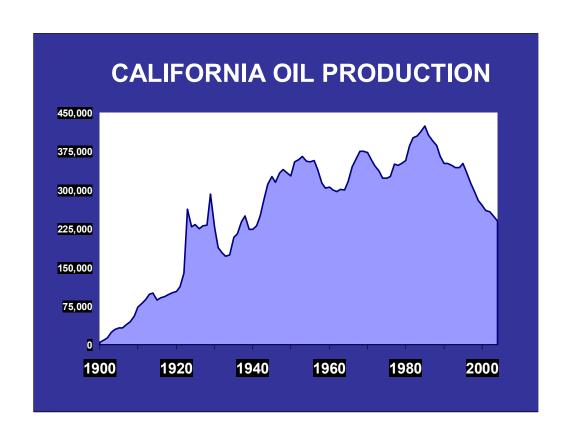


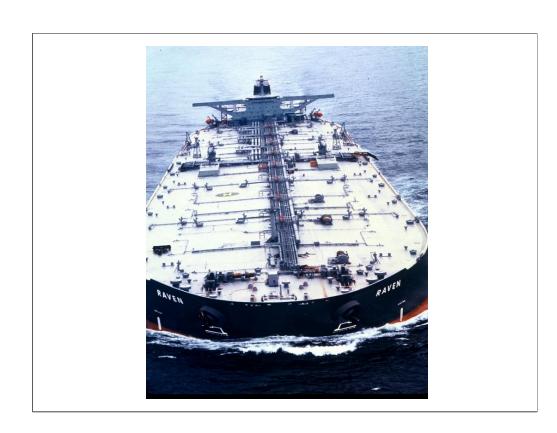
If you think of the original U.S. oil endowment as a six pack, four of the cans are empty. Two remain for all future generations of Americans.



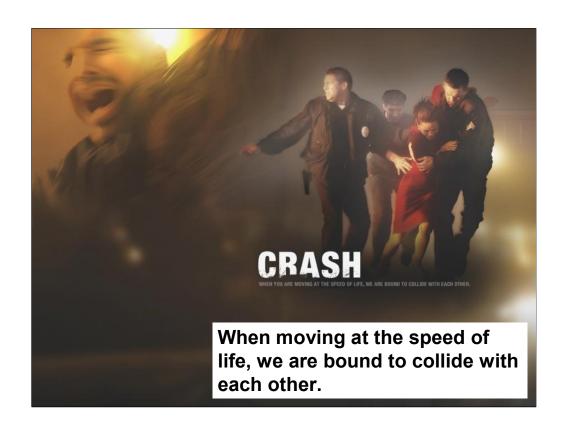


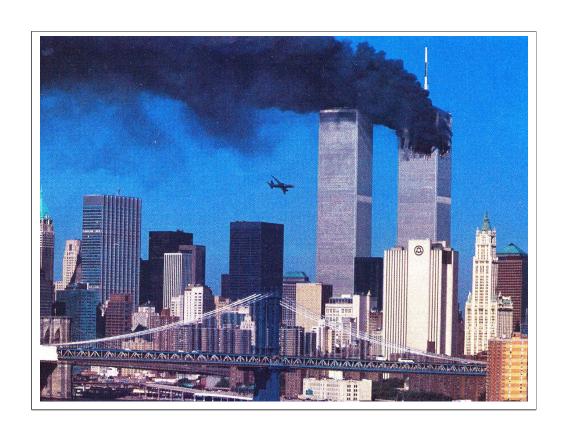


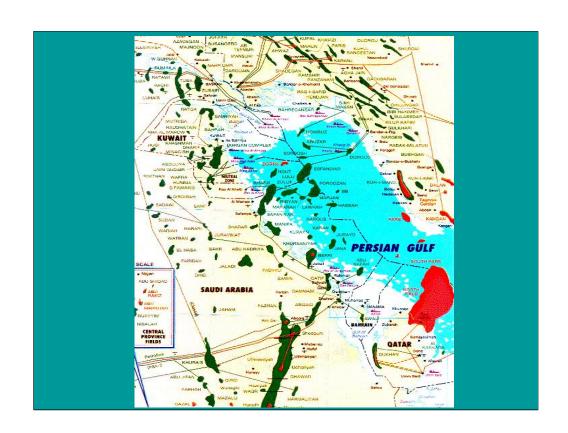


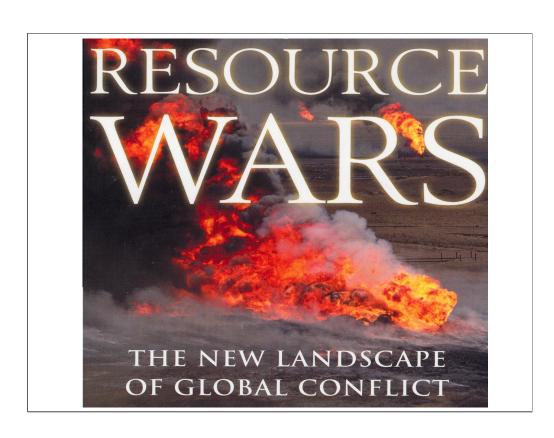


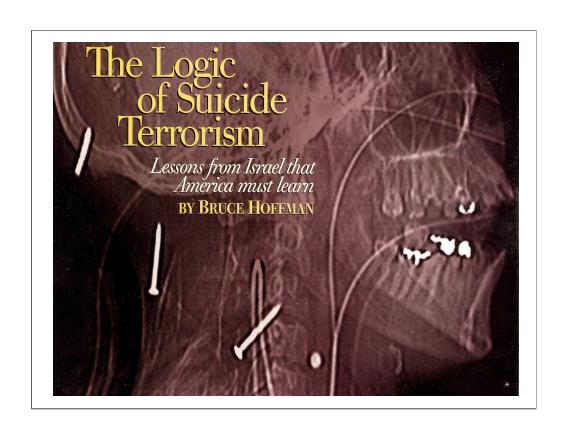




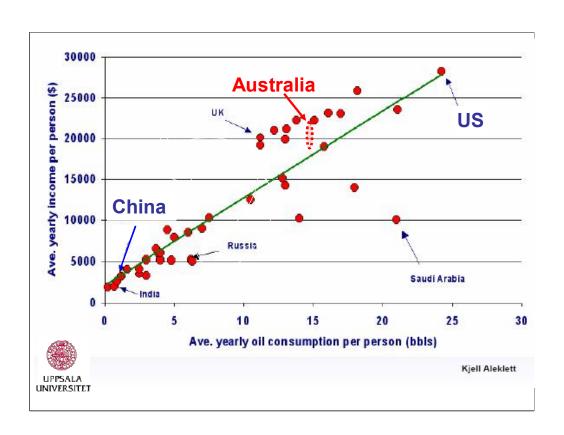














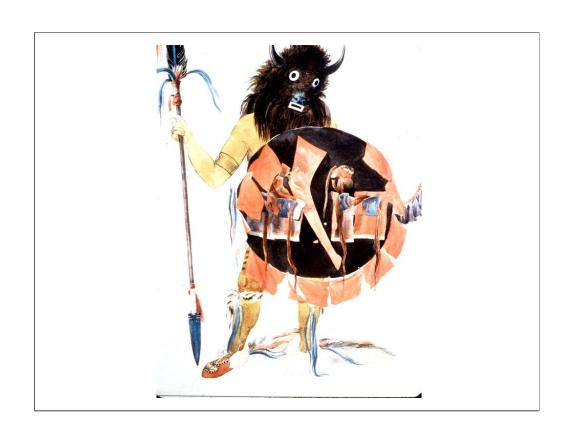
China was a net oil exporter until a decade ago, but by 2030, China's oil imports may equal American imports now.

Americans and Energy



News Flash:

"Power Outage at Mall, 30 Stranded on Escalator"



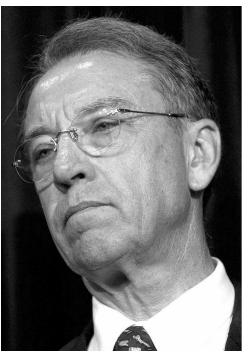


San Francisco August 2005
Natl geo end of cheap oil

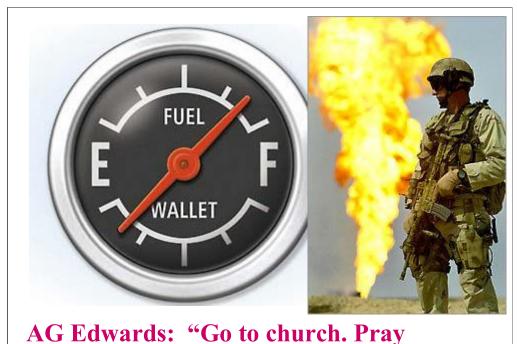
COULD USE PRESIDENTS CARTOON



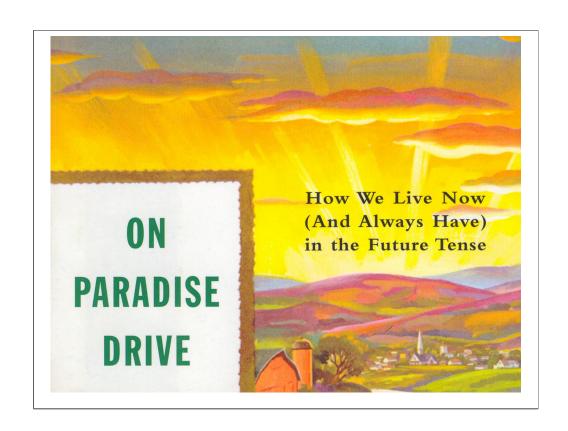
Iowa Senator Charles Grassley

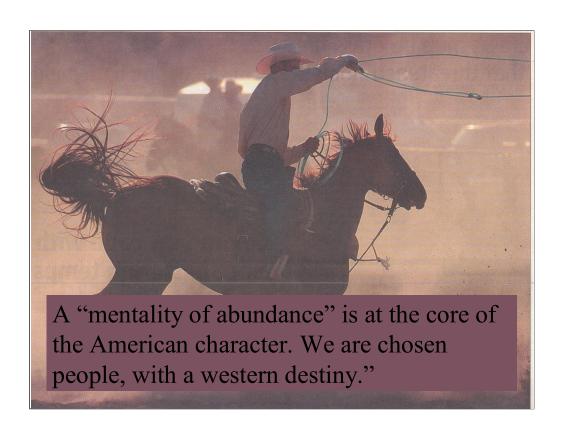


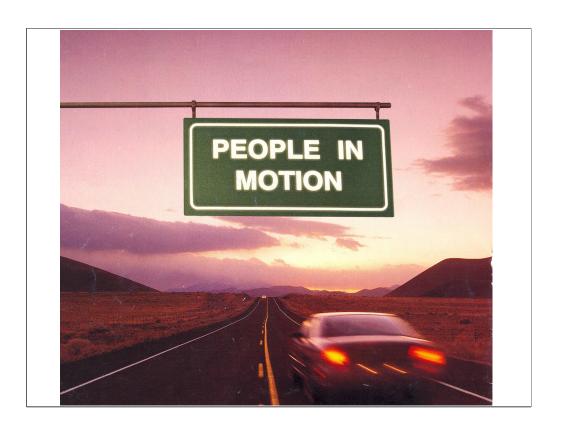
Link to collapse?



AG Edwards: "Go to church. Pray for a mild winter."



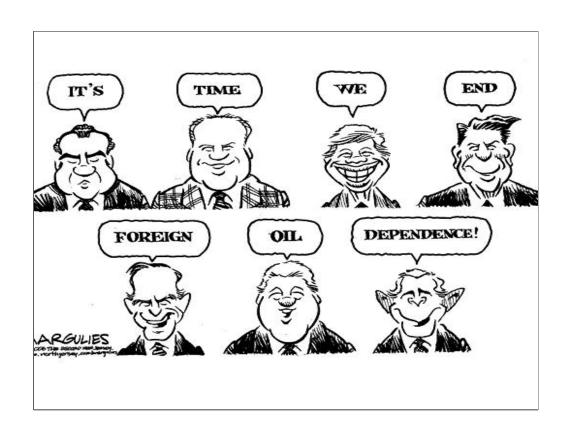




Could follow with lindbergh, amelia

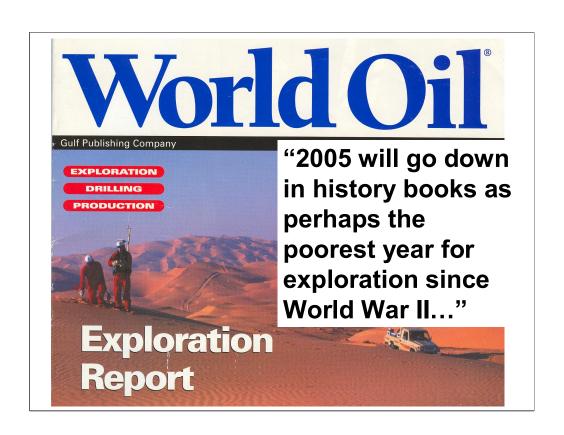






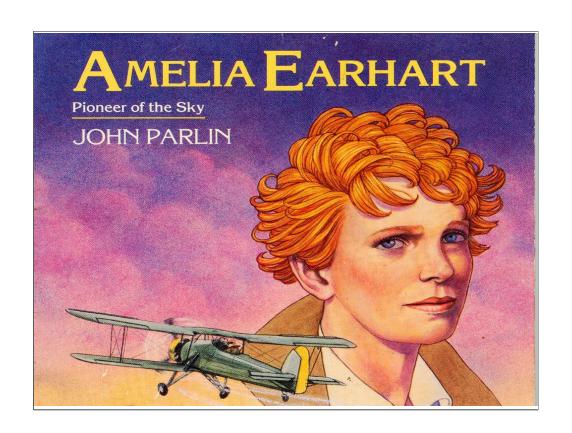


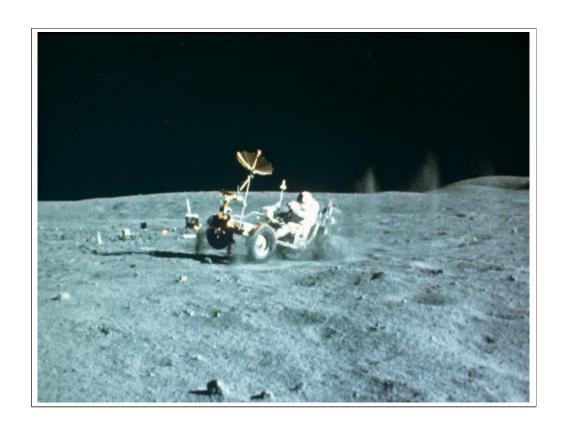










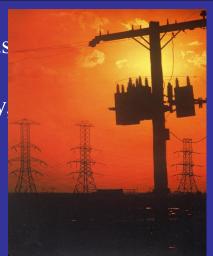


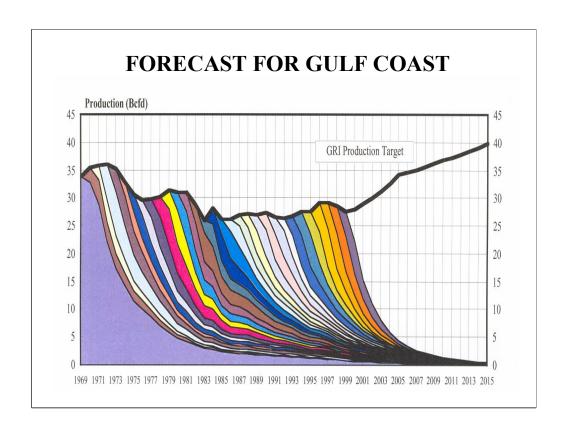
And then 75 years later we are driving on the moon.



Energy is our most precious resource, the greatest 20th century invention. Mobility electricity, technology, telecommunications, agriculture, medicine...

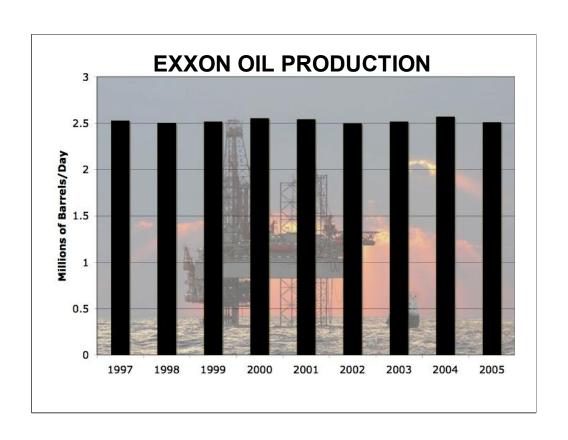
Energy is the original currency, the source of wealth.

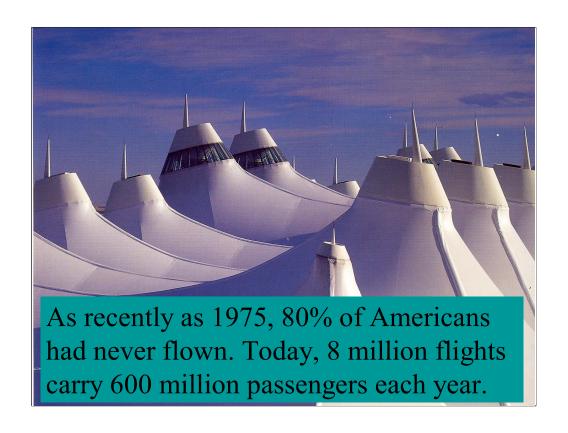




Half the nation's gas is coming from wells less than 3 years old. Here, each color represents one year's worth of new wells. Notice the steepening decline rates since 1985.

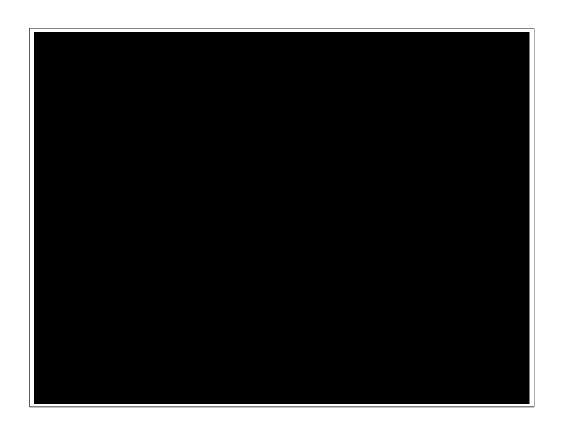


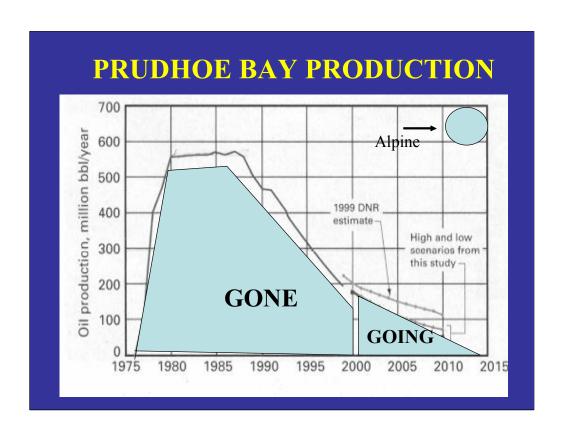












Prudhoe Bay is the largest oil field ever discovered in North America. One in 10 gallons of gasoline you have put in your car since 1977 has come from this Arctic treasure. But 80% of Prudhoe is gone. The small green blob in the upper right, Alpine, is the largest onshore oil field we've found in the U.S. in the last 10 years. The largest oil field we have found in the last 20 years in the U.S., a field in the deepwater Gulf of Mexico, would fill just two of the grid boxes on this chart. Easy come, easy go. The deepwater GOM is America's last great hurrah. Companies are drilling in 10,000 feet of water there and have found about 12 billion barrels of oil, enough to run the U.S. for a bit less than 2 years. This GOM oil will be produced over the next 10-15 years.

